



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/582,817	06/14/2006	Steve Townsend	47226	8681
38505	7590	10/19/2010		
MICHAEL W. TAYLOR			EXAMINER	
P.O. BOX 3791			OMGBA, ESSAMA	
ORLANDO, FL 32802-3791				
			ART UNIT	PAPER NUMBER
			3726	
			MAIL DATE	DELIVERY MODE
			10/19/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/582,817

Applicant(s)

TOWNSEND ET AL.

Examiner

Essama Omgba

Art Unit

3726

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 August 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) 8-18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2 and 5-7 is/are rejected.
- 7) ☒ Claim(s) 3 and 4 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/CG-908)
- Paper No(s)/Mail Date 6/14/2006 & 12/11/2009

- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of the invention of Group I, claims 1-7, in the reply filed on August 6, 2010 is acknowledged. The traversal is on the ground(s) that search and examination of the entire application can be made without serious burden. This is not found persuasive because Applicant has not provided any showing or evidence to support such a conclusion. Clearly consideration of additional claims drawn to one or more distinct groups of inventions in diverse categories of subject matter mandates different fields of search with the associated concomitant hundreds to thousands of patents and time consuming evaluation of those patents which gives rise to a sizeable burden on the examiner. Applicant has not established that Groups I, II and III are not distinct.

The requirement is still deemed proper and is therefore made FINAL.

Specification

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The

Art Unit: 3726

disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Claim Objections

3. Claims 3-7 are objected to because of the following informalities: in claim 3, line 9, --y-- should be inserted after "maximum" second occurrence; and in claim 5, line 4, "tools" should read --tool--. Appropriate correction is required.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1 and 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Petruzzi (WO 99/04926) in view of Yamagushi et al. (JP 09159433) and Buckley et al. (US Patent 6,064,759).

With regards to claim 1, Petruzzi discloses an apparatus for pallet inspection and repair comprising an inspection station and an automated repair station that repairs pallet according to a repair recipe obtained from analysis software running on a computer, see abstract. Petruzzi does not disclose the inspection station having a laser and a camera that collects light from the laser reflected from the pallet, the inspection station connected to a computer, analysis software running on the computer that

analyses the light reflected off the pallet and creates a repair recipe for the pallet.

However Yamagushi et al. teaches a pallet inspection station comprising a quantization means which quantifies an imaging signal corresponding to each inspected region based on quantization reference level data, and outputs the quantization data, a judging means which has a size judging means which compares module data as a size calculating means and size data, and reference value data which performs dimension measurement of a specified position of an inspecting region based on quantization data, and computes size data, and judges existence of a crack for instance in a control surface of a pallet, see claim 15 of the English translation of JP 09159433. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have connected the inspection station of Petruzzi to a computer with analysis software running on the computer that analyses the light reflected on the pallet, in light of the teachings of Yamagushi et al., in order to more efficiently inspect the pallet.

Although Yamagushi et al. does not explicitly disclose using a laser and a camera that collects light from the laser reflected from the pallet, however Buckley et al. teaches using a laser 3 and a camera 2 in inspecting a part 4 in conjunction with computer analysis software, see column 5, lines 52-67 and column 6, lines 1-3. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have used a laser and a camera that collects light from the laser reflected from the pallet in the apparatus of Petruzzi/Yamagushi et al., in light of the teachings of Buckley et al., in order to more accurately determine the state of a pallet when inspecting the pallet and in repair it more efficiently.

Regarding claims 5-7, Applicant should note that Petruzzi discloses a controlling computer, a program logic controller and a repair recipe generation sub-system. It is also known to use a robot arm for holding a pallet during repair, and it is within the skill level of a worker in the art use a robot controller for controlling the robot arm as desired during the repair process.

6. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Petruzzi/Yamagushi et al./Buckley et al. as applied to claim 1 above, and further in view of Schwaemmie et al. (US Patent 5,070,996).

Petruzzi/Yamagushi et al./Buckley et al. discloses an apparatus for pallet inspection and repair as shown above except for using a robotic arm that grips the pallet in subsequent repair steps. However it is known to use a robotic arm to move a pallet in repairing the pallet as attested by Schwaemmie et al., see column 3, lines 24-39. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have used a robotic arm that grips the pallet in subsequent repair steps, in the apparatus of Petruzzi/Yamagushi et al./Buckley et al., in light of the teachings of Schwaemmie et al., as is known in the art.

Allowable Subject Matter

7. Claims 3 and 4 would be allowable if rewritten to overcome the objections set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Essama Omgba whose telephone number is (571) 272-4532. The examiner can normally be reached on M-F 9-6:30, 1st Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bryant can be reached on (571) 272-4526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Essama Omgba/
Primary Examiner, Art Unit 3726

eo
October 14, 2010

